

Claims

- [c1] 1.A method for displaying an image on a standard interlaced video or television monitor in a flicker-free manner comprising the steps of:

 - (a)combining a right perspective image with a left perspective image in a video frame by dividing each field into an odd number of substantially equal subfields and alternating the right and left perspective images with each subfield;
 - (b)providing shutter glasses which can selectively block either the left eye view or the right eye view of a user;
 - (c)generating a trigger signal marking the end of each subfield and the commencement of the next subfield; and
 - (d)blocking one eye view for the duration of a first subfield and the other eye view for the duration of the next subfield and thereafter alternating between the left eye and right views, coinciding with the commencement of each subfield.

[c2] 2.The method of claim 1 wherein each field is divided into three substantially equal subfields.

[c3] 3.The method of claim 2 wherein the trigger signal is generated just before the end of a subfield in a first field and just after the end of a subfield in a second field.

[c4] 4.The method of claim 3 wherein the trigger signal is generated about 10 horizontal lines before the end of a subfield in the first field and 10 horizontal lines after the end of a subfield in the second field.

[c5] 5.The method of claim 3 wherein the light intensity of the video signal is decreased in the band commencing with the trigger signal and ending with the end of the subfield in the first field and increased in the band commencing with the end of a subfield and ending with the trigger signal in the second field.

[c6] 6.An apparatus for displaying a stereoscopic image on a standard video or

television monitor in a flicker-free manner for use with a composite video signal wherein a right and left perspective image are combined in a video frame wherein each field is divided into an odd number of subfields such that the right and left image perspectives are alternated between the subfields, said apparatus comprising:

(a) a sync separator which receives the composite video signal displayed on the television monitor and detects the horizontal and vertical refresh signals;

(b) a counter operatively connected to the sync separator which counts the horizontal refresh signals, resetting the count to zero with each vertical refresh signal and divides the number of horizontal refresh signals per field by the odd number of subfields per field to generate each subfield;

(c) a trigger which receives a signal from the counter and outputs a signal when the end of each subfield is reached;

(d) means for alternating the trigger output signal between the right cell and the left cell of a pair of shutter glasses; wherein the shutter glasses cells darken in response to the trigger output signal.

- [c7] 7. The apparatus of claim 6 further comprising a pair of shutter glasses operatively connected to the alternation means.
- [c8] 8. The apparatus of claim 6 wherein there are 3 subfields per field.
- [c9] 9. The apparatus of claim 7 further comprising a clear filter attached to the shutter glasses which slightly scatters visible light.